

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

CARDWARE INC.,

Plaintiff

v.

SAMSUNG ELECTRONICS CO., LTD.;
SAMSUNG ELECTRONICS AMERICA,
INC.,

Defendants.

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Civil Action No. 2:22-cv-00141-JRG-RSP

JURY TRIAL DEMANDED

**DEFENDANTS' PRELIMINARY PROPOSED CLAIM CONSTRUCTIONS AND
PRELIMINARY IDENTIFICATION OF EXTRINSIC EVIDENCE**

Pursuant to Local Patent Rule ("P.R.") 4-2 and the Court's December 28, 2022, Amended Docket Control Order (Dkt. No. 59), Defendants Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc., hereby serve on Plaintiff CardWare Inc. the following preliminary proposed claim constructions of terms in U.S. Patent No. 10,339,520; U.S. Patent No. 10,628,820; U.S. Patent No. 10,810,579; U.S. Patent No. 11,176,538; and U.S. Patent No. 11,328,286 ("the Asserted Patents"), and their preliminary identification of extrinsic evidence.

Defendants' proposed claim constructions herein are consistent with the understanding of one of ordinary skill in the art in light of the intrinsic evidence, including the specifications, patent claims, the file histories of the Asserted Patents, the Asserted Patents and/or any patent application(s) incorporated by reference in the Asserted Patents, any related patents, the file histories of any related patent applications and the specifications of the patents that issued from those related patent applications, and relevant extrinsic evidence, including dictionary and textbook evidence.

Defendants' proposed claim constructions and identification of extrinsic evidence are preliminary. Defendants reserve the right to supplement and/or amend, for example, after they have had a full opportunity to review Plaintiff's proposed constructions and extrinsic evidence, and as they meet and confer with Plaintiff as required under P.R. 4-2(c). Defendants reserve the right to propose constructions for any additional terms that are identified by CardWare Inc. Defendants further reserve the right to supplement and/or amend as the parties work toward the preparation of a Joint Claim Construction and Prehearing Statement as required under P.R. 4-3.

As discovery is ongoing, Defendants reserve the right to supplement and/or amend their proposed constructions based on newly available evidence, including documents, discovery responses, and testimony obtained during discovery. Defendants further reserve the right to supplement and/or amend their proposed constructions if new products are accused of infringement.

In addition to the preliminary disclosure of extrinsic evidence herein, Defendants reserve the right to rely on prior art and invalidity positions identified in Defendants' Invalidity Contentions, and other prior art, to explain the state of the art and/or to show the ordinary meaning of claim terms to those skilled in the art.

Defendants further reserve the right to supplement and/or amend as otherwise allowed pursuant to the Patent Local Rules.

Defendants further reserve the right to rely on the expert testimony of Dr. Vijay Madiseti to support Defendants' preliminary claim constructions, including Defendants' indefiniteness challenges, and to respond to any claim construction offered by Plaintiff. If needed, testimony from Dr. Madiseti may concern the state of the art, ordinary meanings of one or more of the claim terms, including the proposed claim terms identified herein, and what one of ordinary skill

in the art would understand those claim terms to mean in view of the intrinsic evidence, including the specifications, patent claims, the file histories of the Asserted Patents, the patents and/or any patent application(s) incorporated by reference in the Asserted Patents, any related patents, the file histories of any related patent applications and the specifications of the patents that issued from those related patent applications, and relevant extrinsic evidence, including dictionary and textbook evidence. That testimony may also include testimony that certain claim terms are indefinite because they fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.

Defendants further reserve the right to include additional extrinsic evidence in support of their preliminary claim constructions, as well as the right to add expert testimony to support Defendants' proposed constructions and/or indefiniteness positions and to respond to proposed constructions and/or supporting arguments offered by Plaintiff. If needed, testimony from such an expert may concern the state of the art, ordinary meanings of claim terms, and what one of ordinary skill in the art would understand claim terms to mean in view of the intrinsic and/or extrinsic evidence. Such testimony could further include an opinion that a person of ordinary skill in the art would find claim terms indefinite, because when viewed in light of the specification and prosecution history, they fail to inform, with reasonable certainty, those skilled in the art about the scope of the claimed invention. Defendants reserve the right to rely on the positions of Plaintiff or its expert witnesses concerning claim construction or the scope and/or meaning of claim terms in any other proceedings.

Notwithstanding their proposed constructions herein, Defendants reserve the right to assert defenses under 35 U.S.C. § 112 for indefiniteness and lack of written description and/or

enablement of claim terms, including, for instance, those exemplarily set forth in Defendants' Invalidity Contentions and the following terms:

I. Preliminary Proposed Claim Constructions and Preliminary Extrinsic Evidence

A. Constructions that Apply to Independent Claims

No.	Term/Phrase/Clause and Claim(s)	Preliminary Construction	Preliminary Extrinsic Evidence
1.	"cryptographic processor" '820 patent: Claim 1 '579 patent: Claim 23 '538 patent: Claim 27	"a processor that is dedicated to carrying out cryptographic operations"	ROSS ANDERSON ET AL., <i>CRYPTOGRAPHIC PROCESSORS – A SURVEY</i>, UNIVERSITY OF CAMBRIDGE COMPUTER LABORATORY, TECHNICAL REPORT NUMBER 641 (AUGUST 2005). (Bates Nos. SAM-CW-00079308–SAM-CW-00079326) LUBOS GASPAR, <i>CRYPTO-PROCESSOR – ARCHITECTURE, PROGRAMMING AND EVALUATION OF THE SECURITY</i> (PH.D THESIS, JEAN MONNET UNIVERSITY, 2012), INCLUDING AT 3.1.2.2. (Bates Nos. SAM-CW-00079327–SAM-CW-00079516) Defendants reserve the right to rely on expert testimony regarding this term.
2.	"biometric sensor" '520 patent: Claim 20 '820 patent: Claim 20 '579 patent: Claims 7, 15 '538 patent: Claim 1	"a sensor capable of identifying a user through contact"	Defendants reserve the right to rely on expert testimony regarding this term.

No.	Term/Phrase/Clause and Claim(s)	Preliminary Construction	Preliminary Extrinsic Evidence
3.	“static” ’520 patent: Claims 1, 10, 18, 23 ’820 patent: Claim 18 ’579 patent: Claims 21, 22 ’538 patent: Claims 1, 21, 27-30 ’286 patent: Claims 20, 21, 24-27	IPR Disclaimer: “remaining the same and not updated after a certain number of transactions or certain time period” ¹	Defendants reserve the right to rely on expert testimony regarding this term.
4.	“in place of” ’520 patent: Claims 1, 10, 23 ’820 patent: Claims 1, 11, 15 ’579 patent: Claims 1, 3-6, 15, 19, 21, 23 ’538 patent: Claims 1, 4, 8, 18-21, 23, 25, 27-30	IPR Disclaimer: “replacing, not by means of encryption” OR “replacing the actual physical/logical placeholder for credit card information”	Defendants reserve the right to rely on expert testimony regarding this term.
5.	“transaction payment request” ’579 patent: Claim 19 ’538 patent: Claim 1	“a request for payment details received at a user device via NFC transmission” OR “a request for limited-use payment information received at a user device via NFC transmission”	Defendants reserve the right to rely on expert testimony regarding this term.
6.	“device account number” ’520 patent: Claims 1, 10, 12, 13, 17, 19	IPR Disclaimer: “account number specific to a single device”	Defendants reserve the right to rely on expert testimony regarding this term.

¹ Samsung contends this claim term is indefinite, as set forth in Section II.B, but to the extent it is not found indefinite, Samsung proposes a construction in the alternative.

No.	Term/Phrase/Clause and Claim(s)	Preliminary Construction	Preliminary Extrinsic Evidence
	'820 patent: Claim 10 '579 patent: Claims 2-6, 9, 12, 21-23 '538 patent: Claims 5, 6, 18, 21, 23, 27, 29 '286 patent: Claims 1, 20, 21, 24-27		
7.	“card issuer” '820 patent: Claims 1, 10, 11, 15, 20 '579 patent: Claims 1-6, 9, 12, 15, 19, 21, 23 '286 patent: Claims 1, 4, 6, 11, 12, 17	IPR Disclaimer: “an entity that issues payment cards to consumers”	Defendants reserve the right to rely on expert testimony regarding this term.

B. Constructions that Apply to Only Dependent Claims

No.	Term/Phrase/Clause and Claim(s)	Preliminary Construction	Preliminary Extrinsic Evidence
1.	“security number” '579 patent: Claim 5	“a number having the same functionality as a card issuer provided security code”	Defendants reserve the right to rely on expert testimony regarding this term.
2.	Entire Claim '579 patent: Claim 13	The claimed method steps must be performed in the order that they are claimed.	Defendants reserve the right to rely on expert testimony regarding this term.

II. **Indefinite Terms**

A. Independent Claims – Each of the following independent claims lacks a clear antecedent basis for the identified term/phrase/clause. For each term/phrase/clause identified below, Samsung reserves the right to rely on the expert testimony of Dr. Vijay Madiseti. Dr. Madiseti may opine on how the quoted language fails to inform, with reasonable certainty, those skilled in the art about the scope of that language because, for example, (a) it lacks antecedent basis in the claim, (b) there are multiple possible antecedent bases, (c) it is unclear whether there is intended to be an antecedent basis, or (d) is otherwise not reasonably certain. If CardWare proposes a construction, Dr. Madiseti may opine on the construction of the claim to the extent possible based on the intrinsic record and any extrinsic evidence identified.

No.	Term/Phrase/Clause and Claim(s)	Indefiniteness
1.	“the payment information” '520 patent: Claim 1	Indefinite
2.	“said static device account number”	Indefinite

No.	Term/Phrase/Clause and Claim(s)	Indefiniteness
	'520 patent: Claim 1	
3.	“wherein the identification, selection, information and authorizing operations are exchanged wirelessly between the electronic device and the ATM via NFC; and, wherein the ATM is configured for performing the user selected account operation using the identification and authorizing information; and, wherein the identification and authorizing information exchanged wirelessly between the electronic device and the ATM comprises: statically and dynamically generated limited-use number portions” '520 patent: Claim 18	Indefinite
4.	“the payment information provided by the computing device is used in online transactions in place of a card issuers payment card information” '820 patent: Claim 15	Indefinite
5.	“the electronic device”; “the device inputs”; and “the electronic device” '538 patent: Claim 25	Indefinite
6.	“said limited-use payment information” '538 patent: Claim 1	Indefinite
7.	“the communication interface” '538 patent: Claim 25	Indefinite
8.	“the card issuer authority”; “a card issuer authority”	Indefinite

No.	Term/Phrase/Clause and Claim(s)	Indefiniteness
	'286 patent: Claim 1	

B. Dependent Claims – Each of the following dependent claims lacks a clear antecedent basis for the identified term/phrase/clause either in the identified claim or a claim from which it depends. For each term/phrase/clause identified below, Samsung reserves the right to rely on the expert testimony of Dr. Vijay Madisetti. Dr. Madisetti may opine on how the quoted language fails to inform, with reasonable certainty, those skilled in the art about the scope of that language because, for example, (a) it lacks antecedent basis in the claim or any claim from which the identified claim depends, (b) there are multiple possible antecedent bases, (c) it is unclear whether there is intended to be an antecedent basis, or (d) is otherwise not reasonably certain. If CardWare proposes a construction, Dr. Madisetti may opine on the construction of the claim to the extent possible based on the intrinsic record and any extrinsic evidence identified.

No.	Term/Phrase/Clause and Claim(s)	Indefiniteness
1.	“issued payment information”; “an issuer provided payment information”; “the issuer provided payment information”; “a static device account number payment information”; “the payment information”; “a issuer provided payment information”; “payment information”; “issuer provided payment information” '520 patent: Claim 10	Indefinite
2.	“the payment information” '520 patent: Claim 23	Indefinite
3.	“the limited-use number”	Indefinite

No.	Term/Phrase/Clause and Claim(s)	Indefiniteness
	'520 patent: Claims 6, 7	
4.	“the payment transaction comprises a cryptographic hash of the transaction unit” '520 patent: Claim 8	Indefinite
5.	“accepting a user input of issued payment information input at a touch screen display of the electronic device”; “the electronic device is configured to accept the user input by at least one of a means comprising: a touch sensor array; a touch screen; a keypad; buttons; device motion; an accelerometer; a biometric input; a proximity contact sensor; optical sensors; an NFC unit; a wireless interface; a wired connection; a USB connection; an RF antenna; an inductor assembly” '520 patent: Claim 11	Indefinite *Samsung alternatively contends that this claim is an improper dependent claim and is therefore invalid under pre-AIA § 112(4) and/or AIA § 112 ¶ 4.
6.	“the issuer provided payment information” '520 patent: Claim 17	Indefinite
7.	“the identification and authorizing information” '520 patent: Claim 19	Indefinite
8.	“the card processing authority” '820 patent: Claim 4	Indefinite
9.	“a successful priming action” '579 patent: Claim 13	Indefinite
10.	“said confirmation result”	Indefinite

No.	Term/Phrase/Clause and Claim(s)	Indefiniteness
	'538 patent: Claim 3	
11.	“said device account information” '538 patent: Claim 4	Indefinite
12.	“said combining device” '538 patent: Claim 8	Indefinite
13.	“said device-specific information” '538 patent: Claim 8	Indefinite
14.	“said dynamically generating said card validation value number” '538 patent: Claim 20	Indefinite
15.	“The electronic device of claim 25, further comprising . . .” '538 patent: Claim 30	Indefinite
16.	“the limited-use payment information” '538 patent: Claims 4-6, 8-17	Indefinite
17.	“the singular counted transaction” '538 patent: Claim 5	Indefinite
18.	“said information” '538 patent: Claims 6, 9	Indefinite
19.	“said device processor” '538 patent: Claim 27	Indefinite
20.	“said information” '538 patent: Claim 27	Indefinite
21.	“said secrets”	Indefinite

No.	Term/Phrase/Clause and Claim(s)	Indefiniteness
	'538 patent: Claim 27	
22.	“said payment account information” '538 patent: Claim 27	Indefinite
23.	“said payment account” '538 patent: Claim 29	Indefinite
24.	“said user device” '538 patent: Claim 30	Indefinite
25.	“the information presented on an interface of said card device” '286 patent: Claim 5	Indefinite
26.	“The user computing device of claim 12” '286 patent: Claim 13	Indefinite
27.	“a card issuer authority” '286 patent: Claims 4	Indefinite

C. Claims Indefinite For Lack of Clarity Based on Reasons Other than Antecedent

Basis – The following claim terms/phrases/clauses are indefinite because a POSITA would not understand them with reasonable certainty. For each term/phrase/clause identified below, Samsung reserves the right to rely on the expert testimony of Dr. Vijay Madiseti. Dr. Madiseti may opine on how the quoted language fails to inform, with reasonable certainty, those skilled in the art about the scope of that language for reasons including the exemplary anticipated expert testimony identified below. If CardWare proposes a construction, Dr. Madiseti may opine on

the construction of the claim to the extent possible based on the intrinsic record and any extrinsic evidence identified.

No.	Term/Phrase/Clause and Claim(s)	Indefiniteness	Expert Testimony
1.	“static” ’520 patent: Claims 1, 10, 18, 23 ’820 patent: Claim 18 ’579 patent: Claims 21, 22 ’538 patent: Claims 1, 21, 27-30 ’286 patent: Claims 20, 21, 24-27	Indefinite ²	CardWare has represented that the pseudo account identifier of the prior art reference Carlson is “not even ‘static’” because it is “regularly updated by the payment processor, and may even be limited to a single use by the device.” Because CardWare has taken the position that such information is not “static,” a POSITA could not be reasonably certain what is required by “static” in the claims.
2.	“its limitations of use” ’286 patent: Claim 1	Indefinite	The word “its” in “wherein a card issuer authority is operable to reject as invalid a transaction attempt outside of its limitations of use” could refer to the “card issuer authority,” the “transaction attempt,” or the “limited-use card payment information.”
3.	“proximity contact sensor”; “proximity contact”; “proximity possession” and “a biometric sensing of a recognized user proximity” ’520 patent: Claim 11	Indefinite	The specification provides no guidance on how to interpret the subjective term “proximity.” In addition, proximity and contact mean different things, and as such a POSITA could not be reasonably certain about

² To the extent this claim term is not found indefinite, Samsung contends it should be construed as set forth in Section I.A.

	'579 patent: Claims 8, 9, 11, 13, 15 '286 patent: Claim 12		the scope of the term "proximity contact."
4.	"a statically generated portions" '538 patent: Claim 25	Indefinite	It is unclear whether this requires one or plural portions. Additionally, if the portions are generated, it is unclear how they can also be static, particularly in view of CardWare's IPR arguments.
5.	"said limited-use number" '538 patent: Claim 21	Indefinite	Claim 19, from which Claim 21 depends, refers to "at least one limited-use numbers," and "combining said at least one limited-use numbers" (using the plural term "numbers"). It is unclear if Claim 21 concerns all limited-use numbers of Claim 19, or just one such number.
6.	"when used in merchant in-store facility transactions" '286 patent: Claim 15	Indefinite	It is unclear whether this claim term refers to using "the limited-use payment information," "the payment card device," or "the computing device."
7.	"The electronic device of claim 25, further comprising a processor and a non-transitory, computer-readable medium storing computer executable instructions" '538 patent: Claim 30	Indefinite	It is unclear what quantity of non-transitory, computer-readable media are within the scope of Claim 30, and on which device(s) those computer-readable media are located.
8.	"said transacted payment information" '286 patent: Claim 6	Indefinite	It is unclear whether this term is referring to the Claim 1 recitation of "a card payment information" or "a limited-use card payment information."

9.	“valid range of device limitations” ’286 patent: Claim 6	Indefinite	It is unclear which “device” is referred to in Claim 6 when read in view of Claim 1.
10.	“the computing device is operable to reject and accept a user authorization to use the device based on the security challenge response” ’286 patent: Claim 12	Indefinite	It is unclear how the computing device can both reject and accept a single user authorization.
11.	“all valid device generated limited-use information elements” ’538 patent: Claim 8	Indefinite	The specification provides no guidance as to how to define the set of all valid device generated limited-use information elements.
12.	“operable to accept a user approval and denial of a payment transaction” ’286 patent: Claim 17	Indefinite	It is unclear how the touch-screen display can both accept and deny a single payment transaction.
13.	“said selected account information” ’538 patent: Claim 19	Indefinite	It is unclear what “said selected account information” combined with the at least one limited-use number is referring to in this claim.
14.	“wherein a card issuing authority is operable to reject as invalid, a payment information used outside of its valid limitations of use” ’286 patent: Claim 15	Indefinite	It is unclear whether “its” refers to the “card issuing authority,” the “payment information,” the “limited-use payment information,” or something else.

15.	“a one-time limited-use numbers” '520 patent: Claim 1	Indefinite	The claim is unclear because it recites “a” (singular) one-time limited-use “numbers” (plural).
16.	“device-specific [information]” '520 patent: Claims 1, 10 '538 patent: Claims 6, 8	Indefinite	It is unclear how one would distinguish between device-specific and user-specific information, particularly given the overlap in those sets of information set forth in '520 patent dependent Claims 12 and 13.
17.	“user-specific information” '520 patent: Claims 1, 10 '538 patent: Claims 8, 28	Indefinite	
18.	“user entered identification and authorizing information is recorded through the user interface of the electronic” '520 patent: Claim 20	Indefinite	It is unclear whether this “entered identification and authorizing information” is the same as “the identification and authorizing information” recited in Claim 18 or some other information.
19.	“a biometric sensor confirming the electronic device has remained in the possession of the user from activation to transaction” '520 patent: Claim 20	Indefinite	The claim concerns a method of facilitating and authorizing an ATM transaction. However, identification and authorization must be completed before the ATM processes the selected operation because that information is used in the ATM operation. Therefore, it is unclear what duration the biometric sensor is confirming.

20.	“thin shaped body”; “a thin payment device”; “a thin card-shaped payment card device” ’820 patent: Claims 1, 11, 15	Indefinite	The specification provides no guidance on what the subjective term “thin” means, or how to distinguish between “thin,” “thin-shaped,” and “thin card-shaped.”
21.	“wherein a limited-use number comprises a device account number”; “combining the limited-use number and said device account number” ’579 patent: Claim 4	Indefinite	The limited-use number comprises a device account number, but the device account number and the limited-use must also be combined. It is unclear whether or how this claim requires a portion of a number to be combined with itself.
22.	“completing the transaction on the electronic device” ’579 patent: Claim 11	Indefinite	“Completing the transaction on the electronic device” is unclear when reading Claim 11 in view of Claim 1 (concerning transmission of payment information to perform a transaction). The claim phrase is also unclear because some transaction steps necessarily occur elsewhere, but the specification does not define what step constitutes the “completing” action.
23.	“imminent payment”; “imminent performance” ’579 patent: Claims 18, 19	Indefinite	The word “imminent” is subjective, and the specification provides no guidance on its interpretation.
24.	“cryptographically combining of at least one information	Indefinite	The claim requires cryptographically combining “at least one information,” which includes in its scope

	accessible on the electronic device” '579 patent: Claim 23		“cryptographically combining <i>one</i> information” with nothing. A POSITA would not be reasonably certain what is required by cryptographically combining an information with nothing.
25.	“disabling a device priming operation responsive to completing a transaction” '579 patent: Claims 13, 14	Indefinite	This method claim previously recites disabling the priming operation and does not recite re-priming the device, thus a POSITA could not be reasonably certain what is required by this method step.

DATED: April 27, 2023

By: /s/ Allan M. Soobert

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing document has been served
via email to all counsel of record on this 27th day of April, 2023.

/s/ Allan M. Soobert

Allan M. Soobert